



SECTION ONE Standard House Diets

Diet manual

Modified Fat Diets

Low Cholesterol, Low Saturated Fat Diet

Adult Treatment Panel III (ATP III) Guidelines (May, 2001)

General Description

This diet follows the ATP III guidelines for treatment of High Blood Cholesterol in Adults. Based on ATP III recommendations, the first step in the treatment of high blood cholesterol begins with therapeutic lifestyle changes (TLC). TLC includes dietary modifications including decreased intake of saturated fat and cholesterol, and increased intake of plant stanols/sterols and viscous (soluble) fiber. In addition, TLC stresses weight reduction and increased physical activity. (1)

Indications for Use

This diet should be initiated for anyone requiring LDL-lowering therapy.

Nutritional Adequacy

In comparison to the Dietary Reference Intakes, this diet is nutritionally adequate with the same exceptions as for the regular diet.

ATP III Therapeutic Lifestyle Changes (TLC)

Research indicates that elevated LDL cholesterol is the major cause of CHD. Clinical trials show that directing therapy toward lowering LDL cholesterol is the best way to reduce risk for CHD. ATP III recommends multifaceted therapeutic lifestyle changes (TLC) to reduce risk for CHD (Table 1). Nutrient composition of diet is outlined below (Table 2).

Low Cholesterol, Low Saturated Fat Diet**Table 1. Recommendations for Therapeutic Lifestyle Changes (TLC)**

- Reduce dietary intakes
 - Saturated fats to <7% of total calories
 - Cholesterol to <200 mg per day
- Increase dietary intakes
 - Plant stanols/sterols to 2 gm per day
 - Viscous (soluble) fiber to 10-25 gm per day
- Attain/maintain desirable body weight
- Increase physical activity

Table 2. Nutrient Composition of the TLC Diet

Nutrient	Recommended Intake
Saturated fat*	< 7% of total calories
Polyunsaturated fat	Up to 10% of total calories
Monounsaturated fat	Up to 20% of total calories
Total fat	25-35% of total calories
Carbohydrate**	50-60% of total calories
Fiber	20-30 gm/day
Protein	Approximately 15% of total calories
Cholesterol	Less than 200 mg/day
Total calories (energy)***	Balance energy intake and expenditure to maintain desirable body weight/prevent weight gain

* Trans fatty acids are another LDL-raising fat that should be kept at a low intake

** Carbohydrate should be derived predominantly from foods rich in complex carbohydrates including grains, especially whole grains, fruits, and vegetables.

*** Daily energy expenditure should include at least moderate physical activity (contributing approximately 200 Kcal per day).

Low Cholesterol, Low Saturated Fat Diet

Food groups	Servings/day	Foods allowed	Foods not allowed
Dairy	Fat free or non fat foods as desired	Skim milk. Hot chocolate with 1% fat or less. Non-fat yogurt.	
	Limit low fat foods to items containing no more than 3 gm fat/ounce	Low fat yogurt or low fat cheeses containing ≤ 3 grams fat/ounce	Cheeses or yogurt with >3 gm fat/ounce. Whole milk, 2% milk, buttermilk, chocolate milk. Eggnog. Milkshakes.
Meat or substitute	Limit to items containing no more than 3 gm fat/ounce 5-6 ounces/day	Baked, broiled or boiled lean beef, fish, pork poultry (no skin) shellfish, or veal. Water-packed canned fish. Soy-based meat substitutes ≤ 3 gm fat/ounce. Hot dogs containing ≤ 3 gm fat each; Sausage containing ≤ 3 gm fat/ounce	Meat or substitute containing >3 gm fat/serving ounce. Fried or oil-packed items. Most luncheon meats, regular hot dogs, regular sausage, peanut butter, Soy-based meat substitutes with >3 gm fat/ounce.
Egg	As desired	Egg whites. Egg substitute.	Whole egg, egg yolk. Fried. Any prepared with added fat or foods not allowed
Potato or substitute		Potato, rice, noodles, or pasta except those not allowed.	Any prepared with added fat or foods not allowed.
Vegetables	3 or more servings	Any vegetable except those not allowed	Any prepared with added fat or foods not allowed.

Low Cholesterol, Low Saturated Fat Diet

Food Groups	Servings/Day	Foods Allowed	Foods Not Allowed
Fruits and Fruit juices	2 or more servings	Any except those not allowed.	Any prepared with added fat or foods not allowed.
Breads and Cereals	Choose whole grain products to increase fiber content. 6 or more servings	Any plain bread, or roll. English muffins. Graham crackers, matzoh, saltines. Baked chips, pretzels. Cereals except those not allowed. Pancakes, french toast or muffins, if prepared with allowed ingredients.	Biscuits, croissants doughnuts. Sweet rolls or regular muffins. Regular pancakes or French toast. Cornbread, snack crackers, croutons. Regular granola-type cereals.
Fats	Fat-free or non-fat foods as desired	Fat-free salad dressing, fat-free mayonnaise, fat-free gravies and sauces.	
	Low fat or regular fat foods; limit to 6 servings/day 1 serving = 2 Tbsp (low fat salad dressing, low fat mayonnaise) 1 serving= 1 tsp (regular margarine, regular mayonnaise or oil) 1 serving = 1 Tbsp. (regular salad dressing) 1 serving = 2 each (non-dairy creamers)	Low fat salad dressing, low fat mayonnaise. Avocado. Regular fat liquid or tub margarine, non-dairy creamer, unsaturated oils (canola, olive, safflower, sunflower, corn, peanut, soybean), regular mayonnaise, regular salad dressing.	Butter, gravy and sauces made with added fat, bacon, or cream

Low Cholesterol, Low Saturated Fat Diet

Food Groups	Servings/Day	Foods Allowed	Foods Not Allowed
Beverages	As desired	Coffee, tea, carbonated beverages, fruit drinks, Gatorade, Koolaid.	Any containing foods not allowed.
Soups	As desired	Broth, broth-based soups, cream soups made with allowed ingredients	Cream soups made with whole milk, added fat or foods not allowed
Desserts/ Sweets	In moderation	Gelatin, angel-food cake, fruit ice, popsicle, other fat-free desserts. Low fat desserts with ≤ 3 gm fat/serving. Honey, jelly, sugar, syrup, hard candy, gum drops, cocoa, marshmallows.	Regular cakes, cookies, pastries, pies, custards puddings, ice cream. Chocolate. Coconut.
Miscellaneous	As desired	Salt, pepper, lemon, herbs, spices, seasonings, catsup, mustard, lemon, pickles, vinegar.	

Low Cholesterol, Low Saturated Fat Diet**Suggested Meal Plan**

Breakfast	Lunch	Dinner
Fruit or Juice	2-3 oz Meat or substitute	2-3 oz Meat or substitute
Cereal	Potato or substitute	Potato or substitute
Egg substitute	Vegetable	Vegetable
	Salad/Low Fat Salad Dressing	Salad/Low Fat Salad Dressing
1 pat Margarine	1 pat Margarine	1 pat Margarine
Jelly	Fruit/Dessert	Fruit/Dessert
Toast	Bread	Bread
Jelly	Jelly	Jelly
Skim Milk		Skim Milk
Beverage	Beverage	Beverage

References

Third Report of the National Cholesterol Education Program (NCEP) Expert Panel on Detection, Evaluation, and Treatment of High Blood Cholesterol in Adults (Adult Treatment Panel III) Executive Summary. National Institutes of Health, National Heart, Lung and Blood Institute. May, 2001